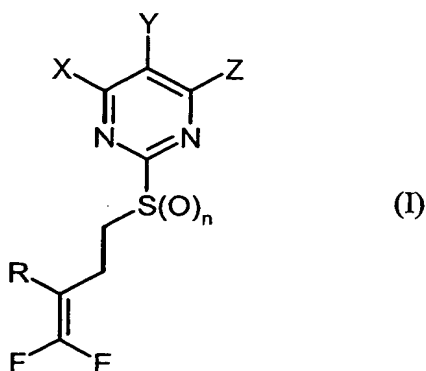


- 99 -

We claim:

1. A compound of the formula (I)



in which

n represents the numbers 0, 1 or 2,

R represents hydrogen or fluorine,

X, Y and Z independently of one another

represent hydrogen, nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, hydroxyl, cyanato, thiocyanato, halogen,

represent in each case optionally cyano-, halogen- or C₁-C₆-alkoxy-substituted alkyl, alkylcarbonyl, alkoxy, alkoxy carbonyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfonyloxy, alkylamino, alkylaminocarbonyl, alkoxy-carbonylamino, alkylsulfonylamino, dialkylamino, dialkylaminocarbonyl or dialkylaminosulfonyl having in each case 1 to 6 carbon atoms in the alkyl groups,

represent in each case optionally halogen-substituted alkenyl, alkenyloxy, alkenyloxycarbonyl, alkynyl, alkynyloxy or alkynyloxycarbonyl having in each case 2 to 6 carbon atoms in the alkenyl or alkynyl groups,

5 represent cycloalkyl, cycloalkenyl or cycloalkylalkyl having in each case 3 to 6 carbon atoms in the cycloalkyl or cycloalkenyl group and, if appropriate, 1 to 4 carbon atoms in the alkyl moiety,

10 represent phenyl, phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thio-carbamoyl, halogen, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy, C₁-C₄-halo-alkoxy, C₁-C₄-alkylthio, C₁-C₄-haloalkylthio or C₁-C₄-alkoxy-carbonyl, or

15 together represent a benzo grouping or represent alkylene or alkenylene having in each case up to 4 carbon atoms, where the carbon chain may be interrupted by 1 to 3 nitrogen atoms or 1 to 2 (not directly adjacent) oxygen atoms and the ring thus formed is for its part optionally substituted by halogen or alkyl having 1 to 4 carbon atoms,

20 and at least one of the radicals X, Y or Z

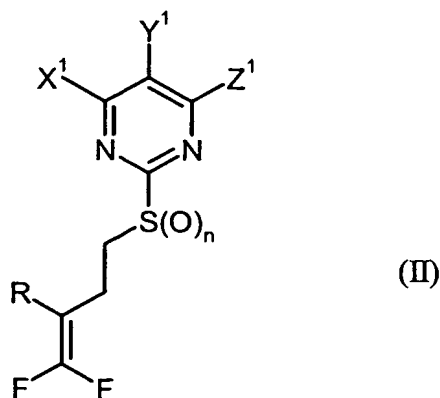
represents a saturated or unsaturated monocyclic or bicyclic heterocyclyl grouping having up to 10 carbon atoms and up to 5 nitrogen atoms and/or one oxygen or sulfur atom which optionally additionally contains one or two oxo groupings (C=O), a thioxo grouping (C=S), a -SO grouping or a -SO₂ grouping and which optionally contains up to 4 substituents from the following list:

25 nitro; amino; cyano; carboxyl; carbamoyl; thiocarbamoyl; hydroxyl; halogen; 30 in each case optionally cyano-, halogen- or C₁-C₆-alkoxy-substituted alkyl,

alkylcarbonyl, alkoxy, alkoxycarbonyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfonyloxy, alkylamino, alkylaminocarbonyl, alkoxycarbonylamino, alkylsulfonylamino, dialkylamino, dialkylaminocarbonyl or dialkylaminosulfonyl having in each case 1 to 6 carbon atoms in the alkyl groups; in each case optionally halogen-substituted alkenyl, alkenyloxy, alkenyloxycarbonyl, alkynyl, alkynyloxy or alkynyloxycarbonyl having in each case 2 to 6 carbon atoms in the alkenyl or alkynyl groups; cycloalkyl, cycloalkenyl or cycloalkylalkyl having in each case 3 to 6 carbon atoms in the cycloalkyl or cycloalkenyl group and, if appropriate, 1 to 4 carbon atoms in the alkyl moiety; phenyl, benzyl, phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, halogen, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkoxy, C₁-C₄-alkylthio, C₁-C₄-haloalkylthio or C₁-C₄-alkoxycarbonyl.

2. A process for preparing compounds of the formula (I) as claimed in claim 1, characterized in that

(a) compounds of the formula (II),



in which

n and R have the meanings given in claim 1,

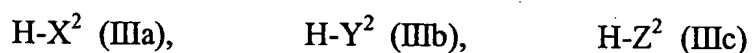
X^1 , Y^1 and Z^1 have in each case the meanings given in claim 1 for the corresponding radicals X, Y and Z, but do not in any case represent a heterocyclyl grouping,

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and at least one of the radicals X^1 , Y^1 or Z^1 represents halogen,

are reacted with heterocycles of the formula (IIIa), (IIIb) or (IIIc)

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in which

15

X^2 , Y^2 and Z^2 represent a saturated or unsaturated, monocyclic or bicyclic heterocyclyl grouping having up to 10 carbon atoms and up to 5 nitrogen atoms and/or one oxygen or sulfur atom which optionally additionally contains an oxo grouping (C=O), a thioxo grouping (C=S), a -SO grouping or a -SO₂ grouping and which optionally contains up to 4 substituents from the following list:

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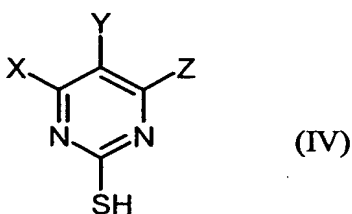
nitro; amino; cyano; carboxyl; carbamoyl; thiocarbamoyl; hydroxyl; halogen; in each case optionally cyano-, halogen- or C₁-C₆-alkoxy-substituted alkyl, alkyl-carbonyl, alkoxy, alkoxycarbonyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfonyloxy, alkylamino, alkylaminocarbonyl, alkoxy-carbonylamino, alkylsulfonylamino, dialkylamino, dialkylaminocarbonyl or dialkylaminosulfonyl having in each case 1 to 6 carbon atoms in the alkyl groups; in each case optionally halogen-substituted alkenyl, alkenyloxy, alkenyloxycarbonyl,

alkynyl, alkynyloxy or alkynyloxycarbonyl having in each case 2 to 6 carbon atoms in the alkenyl or alkynyl groups; cycloalkyl, cycloalkenyl or cycloalkylalkyl having in each case 3 to 6 carbon atoms in the cycloalkyl or cycloalkenyl group and, if appropriate, 1 to 4 carbon atoms in the alkyl moiety, phenyl, benzyl, phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, halogen, C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkoxy, C₁-C₄-alkylthio, C₁-C₄-haloalkylthio, C₁-C₄-alkoxy-carbonyl, C₁-C₂-alkylenedioxy or C₁-C₂-haloalkylenedioxy,

if appropriate in the presence of one or more reaction auxiliaries and if appropriate in the presence of one or more diluents,

or when

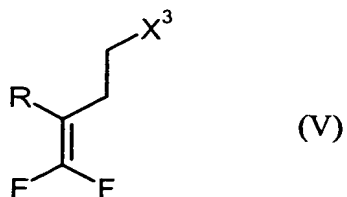
(b) compounds of the formula (IV),



in which

X, Y and Z have the meanings given in claim 1,

are reacted with compounds of the formula (V),



in which

R has the meanings given in claim 1 and

X³ represents halogen,

if appropriate in the presence of one or more reaction auxiliaries and if appropriate in the presence of one or more diluents,

and, if appropriate, the compounds of the formula (I) obtained according to process (a) or (b) are in a customary manner converted into other compounds of the formula (I) according to the above definition.

3. The compound of the formula (I) as claimed in claim 1, characterized in that

n represents the numbers 0 or 2,

R represents hydrogen or fluorine and

X, Y and Z independently of one another

represent hydrogen, nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, hydroxyl, cyanato, thiocyanato, halogen,

represent in each case optionally cyano-, fluorine-, chlorine-, bromine- or C₁-C₄-alkoxy-substituted alkyl, alkyl-carbonyl, alkoxy, alkoxy-

carbonyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfonyloxy, alkylamino, alkylaminocarbonyl, alkoxycarbonylamino, alkylsulfonylamino, dialkylamino, dialkylaminocarbonyl or dialkylaminosulfonyl having in each case 1 to 5 carbon atoms in the alkyl groups,

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represent in each case optionally fluorine-, chlorine- or bromine-substituted alkenyl, alkenyloxy, alkenyloxycarbonyl, alkynyl, alkynyloxy or alkynyloxycarbonyl having in each case 2 to 5 carbon atoms in the alkenyl or alkynyl groups,

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represent cycloalkyl, cycloalkenyl or cycloalkylalkyl having in each case 3 to 6 carbon atoms in the cycloalkyl or cycloalkenyl group and, if appropriate, 1 to 3 carbon atoms in the alkyl moiety, or

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represent phenyl, phenoxy, phenylthio, pyridyl, furyl or thienyl which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, halogen, by C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkoxy, C₁-C₄-alkylthio, C₁-C₄-haloalkylthio (where in each case halogen preferably represents fluorine or chlorine) or C₁-C₄-alkoxy-carbonyl, or

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together represent a benzo grouping or represent alkylene or alkenylene having in each case up to 4 carbon atoms, where the carbon chain may be interrupted by 1 to 3 nitrogen atoms or 1 to 2 (not directly adjacent) oxygen atoms and the ring thus formed is for its part optionally substituted by fluorine, chlorine, bromine or alkyl having 1 to 3 carbon atoms, and where

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at least one of the radicals X, Y or Z represents a saturated or unsaturated, monocyclic or bicyclic heterocyclyl grouping having 4, 6, 9 or 10 carbon atoms and up to 4 nitrogen atoms and/or one oxygen or sulfur atom which optionally additionally contains one or two oxo groupings (C=O), a thioxo grouping (C=S), a -SO grouping or a -SO₂ grouping and which optionally contains up to 3 substituents from the following list:

nitro; amino; cyano; carboxyl; carbamoyl; thiocarbamoyl; hydroxyl; halogen; in each case optionally cyano-, fluorine-, chlorine-, bromine- or C₁-C₄-alkoxy-substituted alkyl, alkyl-carbonyl, alkoxy, alkoxy-carbonyl, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylsulfonyloxy, alkylamino, alkylaminocarbonyl, alkoxycarbonylamino, alkylsulfonylamino, dialkylamino, dialkylaminocarbonyl or dialkylaminosulfonyl having in each case 1 to 5 carbon atoms in the alkyl groups; in each case optionally halogen-substituted alkenyl, alkenyloxy, alkenyloxycarbonyl, alkynyl, alkynyloxy or alkynyloxycarbonyl having in each case 2 to 5 carbon atoms in the alkenyl or alkynyl groups; cycloalkyl, cycloalkenyl or cycloalkylalkyl having in each case 3 to 6 carbon atoms in the cycloalkyl or cycloalkenyl group and, if appropriate, 1 to 3 carbon atoms in the alkyl moiety, phenyl, benzyl, phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, halogen, by C₁-C₄-alkyl, C₁-C₄-haloalkyl, C₁-C₄-alkoxy, C₁-C₄-haloalkoxy, C₁-C₄-alkylthio, C₁-C₄-haloalkylthio (where in each case halogen preferably represents fluorine or chlorine), C₁-C₄-alkoxy-carbonyl, methylenedioxy or difluoromethylenedioxy.

4. The compound of the formula (I) as claimed in claim 1, characterized in that

n represents 0 and

X, Y and Z independently of one another

5 represent hydrogen nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, hydroxyl, cyanato, thiocyanato, fluorine, chlorine, bromine,

represent in each case optionally cyano-, fluorine-, chlorine-,
bromine-, methoxy-, ethoxy-, n- or i-propoxy-substituted methyl,
10 ethyl, n- or i-propyl, n-, i-, s- or t-butyl, acetyl, propionyl, n- or i-butyroyl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, n-, i-, s- or t-butoxycarbonyl, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, methylsulfinyl, ethylsulfinyl, n- or i-propylsulfinyl, methylsulfonyl, ethylsulfonyl, n- or i-propylsulfonyl, methylsulfonyloxy, ethylsulfonyloxy, n- or i-propylsulfonyloxy, methylamino, ethylamino, n- or i-propylamino, n-, i-, s- or t-butylamino, methylaminocarbonyl, ethylaminocarbonyl, n- or i-propylaminocarbonyl, n-, i-, s- or t-butylaminocarbonyl, methoxycarbonylamino, ethoxycarbonylamino, n- or i-propoxycarbonylamino, n-, i-, s- or t-butoxycarbonylamino, methylsulfonylamino, ethylsulfonylamino, n- or i-propylsulfonylamino, n-, i-, s- or t-butylsulfonylamino, dimethylamino, diethylamino, di-n-propyl-amino, di-i-propyl-amino, dimethylaminocarbonyl, diethylaminocarbonyl, dimethylaminosulfonyl or diethylaminosulfonyl,
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represent in each case optionally fluorine-, chlorine- or bromine-substituted ethenyl, propenyl, butenyl, propenyloxy, butenyloxy, propenyloxycarbonyl, butenyloxycarbonyl, ethynyl, propynyl, butynyl,

propynyloxy, butynyloxy, propynyloxycarbonyl or butynyloxy-carbonyl,

5 represent cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopentenyl, cyclohexenyl, cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl or cyclohexylmethyl, or

10 represent phenyl, phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, fluorine, chlorine, bromine, by methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, difluoromethyl, dichloromethyl, trifluoromethyl, trichloromethyl, chlorodifluoromethyl, fluoro-
15 dichloromethyl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, difluoromethoxy, trifluoromethoxy, chlorodifluoromethoxy, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, di-
fluoromethylthio, trifluoromethylthio, chlorodifluoromethylthio, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, n-, i-, s- or t-butoxycarbonyl, or

20 together represent trimethylene, tetramethylene, propene-1,3-diyl or butadiene1,4-diyl, where the carbon chain may be interrupted by 1 to 3 nitrogen atoms or 1 to 2 (not directly adjacent) oxygen atoms and the ring thus formed is for its part optionally substituted by fluorine, chlorine, bromine, methyl or ethyl, and where

25 at least one of the radicals X, Y or Z represents a saturated or unsaturated, monocyclic or bicyclic heterocyclyl grouping from the group consisting of furyl, benzofuryl, tetrahydrofuryl, thienyl, benzo-
thienyl, pyrrolyl, indazolyl, tetrahydroindazolyl, oxopyrrolyl, pyrrolinyl, pyrrolidinyl, 2,5-dioxo-1-azacyclopentyl, pyrazolyl,
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5 pyrazolinyl, oxopyrazolinyl, 2-oxo-1,3-diazacyclopentyl, imidazolyl, triazolyl, benzotriazolyl, oxotriazolyl, tetrazolyl, oxazolyl, benzoxazolyl, thiazolyl, benzothiazolyl, oxadiazolyl, isoxazolyl, thiadiazolyl, pyridinyl, 1,4-dihydro-4-oxopyridin-1-yl, quinolinyl, isoquinolinyl, piperidinyl, oxopiperidinyl, pyrazinyl, pyridazinyl, pyrimidinyl, 2-oxo-1,3-diazacyclohexyl, morpholinyl, which optionally contains up to 3 substituents from the following list:

10 nitro; amino; cyano; carboxyl; carbamoyl; thiocarbamoyl; hydroxyl; fluorine; chlorine; bromine; iodine; in each case optionally cyano-, fluorine-, chlorine-, bromine-, methoxy-, ethoxy-, n- or i-propoxy-substituted methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, acetyl, propionyl, n- or i-butyryl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxy-carbonyl, n-, i-, s- or t-butoxycarbonyl, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, methylsulfinyl, ethylsulfinyl, n- or i-propylsulfinyl, methylsulfonyl, ethylsulfonyl, n- or i-propylsulfonyl, methylsulfonyloxy, ethylsulfonyloxy, n- or i-propylsulfonyloxy, methylamino, ethylamino, n- or i-propylamino, n-, i-, s- or t-butylamino, methylaminocarbonyl, ethylaminocarbonyl, n- or i-propylaminocarbonyl, n-, i-, s- or t-butylaminocarbonyl, methoxycarbonylamino, ethoxycarbonylamino, n- or i-propoxy-carbonylamino, n-, i-, s- or t-butoxycarbonylamino, methylsulfonyl-amino, ethylsulfonylamino, n- or i-propylsulfonylamino, n-, i-, s- or t-butylsulfonylamino, dimethylamino, diethylamino, di-n-propyl-amino, di-i-propyl-amino, dimethylaminocarbonyl, diethylaminocarbonyl, dimethylaminosulfonyl or diethylaminosulfonyl; in each case optionally fluorine-, chlorine- or bromine-substituted ethenyl, propenyl, butenyl, propenyloxy, butenyloxy, propenyloxy-carbonyl, butenyloxy-carbonyl, ethynyl, propynyl, butynyl, propynyloxy, butynyl-

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oxy, propynyloxycarbonyl or butynyloxycarbonyl, cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopentenyl, cyclohexenyl, cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl or cyclohexylmethyl, phenyl, benzyl, phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thiocarbamoyl, fluorine, chlorine, bromine, by methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, difluoromethyl, dichloromethyl, trifluoromethyl, trichloromethyl, chlorodifluoromethyl, fluorodichloromethyl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, difluoromethoxy, trifluoromethoxy, chlorodifluoromethoxy, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, difluoromethylthio, trifluoromethylthio, chlorodifluoromethylthio, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, n-, i-, s- or t-butoxycarbonyl, methylenedioxy or difluoromethylenedioxy.

5. The compound of the formula (I) as claimed in claim 1, characterized in that n, R, X, Y and Z have the meanings given as particularly preferred in claim 1, where Y preferably represents hydrogen,

and at least one of the radicals

X or Z represents a saturated or unsaturated, monocyclic or bicyclic heterocyclyl grouping from the group consisting of furyl, benzofuryl, tetrahydrofuryl, thienyl, benzothienyl, pyrrolyl, indazolyl, tetrahydroindazolyl, oxopyrrolyl, pyrrolinyl, pyrrolidinyl, 2,5-dioxo-1-azacyclopentyl, pyrazolyl, pyrazolinyl, oxopyrazolinyl, 2-oxo-1,3-diazacyclopentyl, imidazolyl, triazolyl, benzotriazolyl, oxotriazolyl, tetrazolyl, oxazolyl, benzoxazolyl, thiazolyl, benzothiazolyl, oxadiazolyl, isoxazolyl, thiadiazolyl, pyridinyl, 1,4-dihydro-4-

oxopyridin-1-yl, quinolinyl, isoquinolinyl, piperidinyl, oxopiperidinyl, pyrazinyl, pyridazinyl, pyrimidinyl, 2-oxo-1,3-diazacyclohexyl, morpholinyl, which optionally contains up to 3 substituents from the following list:

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nitro; cyano; carboxyl; carbamoyl; thiocarbamoyl; hydroxyl; fluorine; chlorine; bromine; iodine; in each case optionally cyano-, fluorine-, chlorine-, bromine-, methoxy-, ethoxy-, n- or i-propoxy-substituted methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, acetyl, propionyl, n- or i-butyryl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, n-, i-, s- or t-butoxycarbonyl, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, methylsulfinyl, ethylsulfinyl, n- or i-propylsulfinyl, methylsulfonyl, ethylsulfonyl, n- or i-propylsulfonyl, methylsulfonyloxy, ethylsulfonyloxy, n- or i-propylsulfonyloxy, methylamino, ethylamino, n- or i-propylamino, n-, i-, s- or t-butylamino, methylaminocarbonyl, ethylaminocarbonyl, n- or i-propylaminocarbonyl, n-, i-, s- or t-butylaminocarbonyl, methoxycarbonylamino, ethoxycarbonylamino, n- or i-propoxycarbonylamino, n-, i-, s- or t-butoxycarbonylamino, methylsulfonylamino, ethylsulfonylamino, n- or i-propylsulfonylamino, n-, i-, s- or t-butylsulfonylamino, dimethylamino, diethylamino, di-n-propyl-amino, di-i-propyl-amino, dimethylaminocarbonyl, diethylaminocarbonyl, dimethylaminosulfonyl or diethylaminosulfonyl; in each case optionally fluorine-, chlorine- or bromine-substituted ethenyl, propenyl, butenyl, propenyloxy, butenyloxy, propenyloxycarbonyl, butenyloxycarbonyl, ethynyl, propynyl, butynyl, propynyloxy, butynyloxy, propynyloxy-carbonyl or butynyloxycarbonyl; cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cyclopentenyl, cyclohexenyl, cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl or cyclohexylmethyl, phenyl, benzyl,

5 phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case optionally substituted by nitro, cyano, carboxyl, carbamoyl, thio-carbamoyl, fluorine, chlorine, bromine, by methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, difluoromethyl, dichloromethyl, trifluoro-
10 methyl, trichloromethyl, chlorodifluoromethyl, fluorodichloromethyl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, difluoro-methoxy, trifluoromethoxy, chlorodifluoromethoxy, methylthio, ethyl-thio, n- or i-propylthio, n-, i-, s- or t-butylthio, difluoromethylthio, tri-fluoromethylthio, chlorodifluoromethylthio, methoxycarbonyl, ethoxy-carbonyl, n- or i-propoxycarbonyl, n-, i-, s- or t-butoxycarbonyl,

and where the optionally remaining radical X or Z represents hydrogen.

- 15 6. The compound of the formula (I) as claimed in claim 1, characterized in that
- n, R, X and Z have the meanings given as particularly preferred in claim 1, where X and Z preferably represent hydrogen, and
- 20 Y represents a saturated or unsaturated, monocyclic or bicyclic hetero-cyclyl grouping from the group consisting of furyl, benzofuryl, tetra-hydrofuryl, thienyl, benzothienyl, pyrrolyl, oxopyrrolyl, pyrrolinyl, pyrrolidinyl, pyrazolyl, pyrazolinyl, oxopyrazolinyl, 2-oxo-1,3-diaza-cyclopentyl, triazolyl, benzotriazolyl, oxotriazolyl, tetrazolyl, oxazolyl, benzoxazolyl, thiazolyl, benzothiazolyl, oxadiazolyl, isoxa-
25 zolyl, thiadiazolyl, pyridinyl, quinolinyl, isoquinolinyl, piperidinyl, oxopiperidinyl, pyrazinyl, pyridazinyl, pyrimidinyl, 2-oxo-1,3-diaza-cyclohexyl, morpholinyl, which optionally contains up to 3 substituents from the following list:

5 nitro; cyano; carboxyl; carbamoyl; thiocarbamoyl; hydroxyl; fluorine;
chlorine; bromine; iodine; in each case optionally cyano-, fluorine-,
chlorine-, bromine-, methoxy-, ethoxy-, n- or i-propoxy-substituted
methyl, ethyl, n- or i-propyl, n-, i-, s- or t-butyl, acetyl, propionyl, n- or
i-butyryl, methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy,
methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, n-, i-, s-
or t-butoxycarbonyl, methylthio, ethylthio, n- or i-propylthio, n-, i-, s-
or t-butylthio, methylsulfinyl, ethylsulfinyl, n- or i-propylsulfinyl,
10 methylsulfonyl, ethylsulfonyl, n- or i-propylsulfonyl,
methylsulfonyloxy, ethylsulfonyloxy, n- or i-propylsulfonyloxy,
methylamino, ethylamino, n- or i-propylamino, n-, i-, s- or t-butyl-
amino, methylaminocarbonyl, ethylaminocarbonyl, n- or i-propyl-
aminocarbonyl, n-, i-, s- or t-butylaminocarbonyl, methoxycarbonyl-
amino, ethoxycarbonylamino, n- or i-propoxycarbonylamino, n-, i-, s-
15 or t-butoxycarbonylamino, methylsulfonylamino, ethylsulfonylamino,
n- or i-propylsulfonylamino, n-, i-, s- or t-butylsulfonylamino,
dimethylamino, diethylamino, di-n-propyl-amino, di-i-propyl-amino,
dimethylaminocarbonyl, diethylaminocarbonyl, dimethyl-
aminosulfonyl or diethylaminosulfonyl; in each case optionally
20 fluorine-, chlorine- or bromine-substituted ethenyl, propenyl, butenyl,
propenyloxy, butenyloxy, propenyloxycarbonyl, butenyloxycarbonyl,
ethynyl, propynyl, butynyl, propynyloxy, butynyloxy, propynyloxy-
carbonyl or butynyloxycarbonyl; cyclopropyl, cyclobutyl, cyclopentyl,
cyclohexyl, cyclopentenyl, cyclohexenyl, cyclopropylmethyl, cyclo-
25 butylmethyl, cyclopentylmethyl or cyclohexylmethyl, phenyl, benzyl,
phenoxy, phenylthio, pyridyl, furyl or thienyl, which are in each case
optionally substituted by nitro, cyano, carboxyl, carbamoyl, thio-
carbamoyl, fluorine, chlorine, bromine, by methyl, ethyl, n- or
i-propyl, n-, i-, s- or t-butyl, difluoromethyl, dichloromethyl, trifluoro-
30 methyl, trichloromethyl, chlorodifluoromethyl, fluorodichloromethyl,

methoxy, ethoxy, n- or i-propoxy, n-, i-, s- or t-butoxy, difluoromethoxy, trifluoromethoxy, chlorodifluoromethoxy, methylthio, ethylthio, n- or i-propylthio, n-, i-, s- or t-butylthio, difluoromethylthio, trifluoromethylthio, chlorodifluoromethylthio, methoxycarbonyl, ethoxycarbonyl, n- or i-propoxycarbonyl, n-, i-, s- or t-butoxycarbonyl.

- 5
7. A pesticide, characterized in that it comprises at least one compound of the formula (I) as claimed in claim 1.
- 10
8. Use of compounds of the formula (I) as claimed in claim 1 for controlling pests.
9. A method for controlling pests, characterized in that compounds of the formula (I) as claimed in claim 1 or compositions as claimed in claim 7 are
15 allowed to act on pests and/or their habitat.
10. A process for preparing pesticides, characterized in that compounds of the formula (I) as claimed in claim 1 are mixed with extenders and/or surfactants.